Viper Strike Overview

July 2005

LTC John Oxford
PM
Submunitions

Viper Strike Overview

Diameter	5.5 in.
Wingspan	36 in.
Length	36 in.
Weight	42 lb.
Glide Ratio	10:1
Warhead	2.3 lb.
FOV	14^0

- **Discrete effects precision munition**
  - Semi-active las
  - Near 0 CEP
  - Small warhead
  - Hit-to-kill

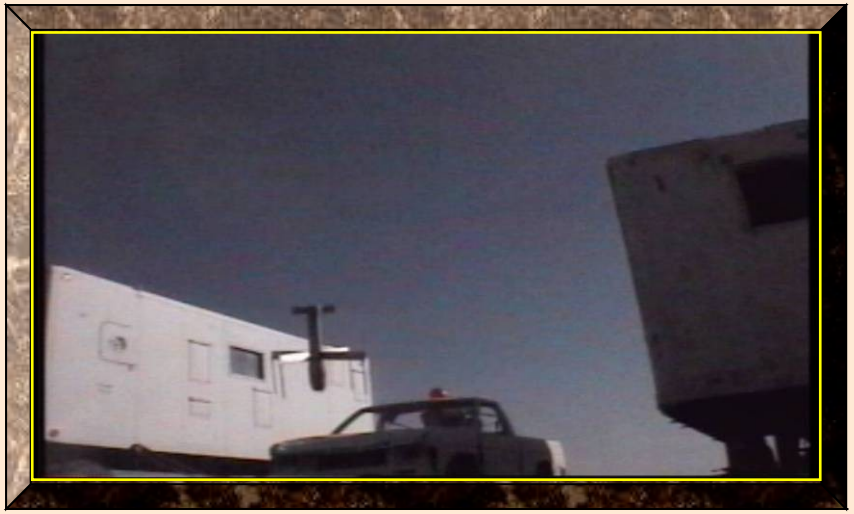
Low Collateral Damage

- **Production airframe/seeker**
- **Successful Army Demos (9 for 9)**

Path Ahead:	Improvement	Demo
• GPS	Extend range 10+miles	2005
• Frag belt	Personnel targets, plus “less than lethal” mode	2005
• Datalink	Max range moving targets plus multiple near-simultaneous target attack	2006

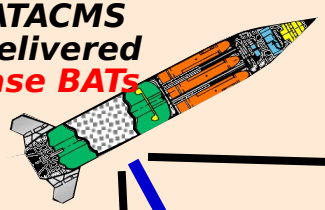
Viper Strike's Greatest Hits

July 2003



Viper Strike Lineage

ATACMS Delivered Base BATs



Eagle Eyes Multi-Mode Seeker Proof of Principle

Viper Strike SAL Seeker Proof of Principle Demos I & II

Hunter-Viper Strike Quick Reaction Capability Fielded

Hunter - Base BAT Demo

Proof of Principle

Operational Capability

Convert Block II Base BAT to

AC-130-Viper Strike ACTD

Viper Strike "TO GO BOX" Capability

Predator/IGNAT Viper Strike Demo

New Production Viper Strike Munition Requirement

AC-130 - Viper Strike Operational Use

Multi-Platforms/ Multi-Missions (i.e. C-RAM)

Predator - Viper Strike Operational Use

Viper Strike's Evolving Requirement

6/02 9/02 12/02 3/03 6/03 9/03 12/03 3/04 6/04 9/04 12/04 3/05 6/05 9/05 12/05

AAE: P³I Bat/UAV Demo

ASARC Memo

P³I Bat on UAV Decision Memo

DAES Review

VCSA confirms armed Hunter need

DA G3 Armed Hunter UNS

P³I Bat on UAV concurrence

ASPB Review

VCSA directs Weaponized UAVS IPT

ASPB validates Hunter/VS QRC procurement

III Corps ONS

DA G3 ONS Endorsement

III Corps 2nd request

AS Rev ASPB Review

ASPB Review

AS Rev ASPB Review

FA receives draft TTPs & CONOPS

strawman draft ORD released

MI receives draft TTPs & CONOPS

III Corps receives draft TTPs & CONOPS

AVN receives draft TTPs & CONOPS

MNC-I receives draft TTPs & CONOPS

TRADOC FC receives draft TTPs &

QRC Community IPT I

QRC Community IPT II

QRC fielded

15th MI Bn Trained & certified

Publish Capability Development Document (CDD)

Demo I WSMR

Demo II WSMR

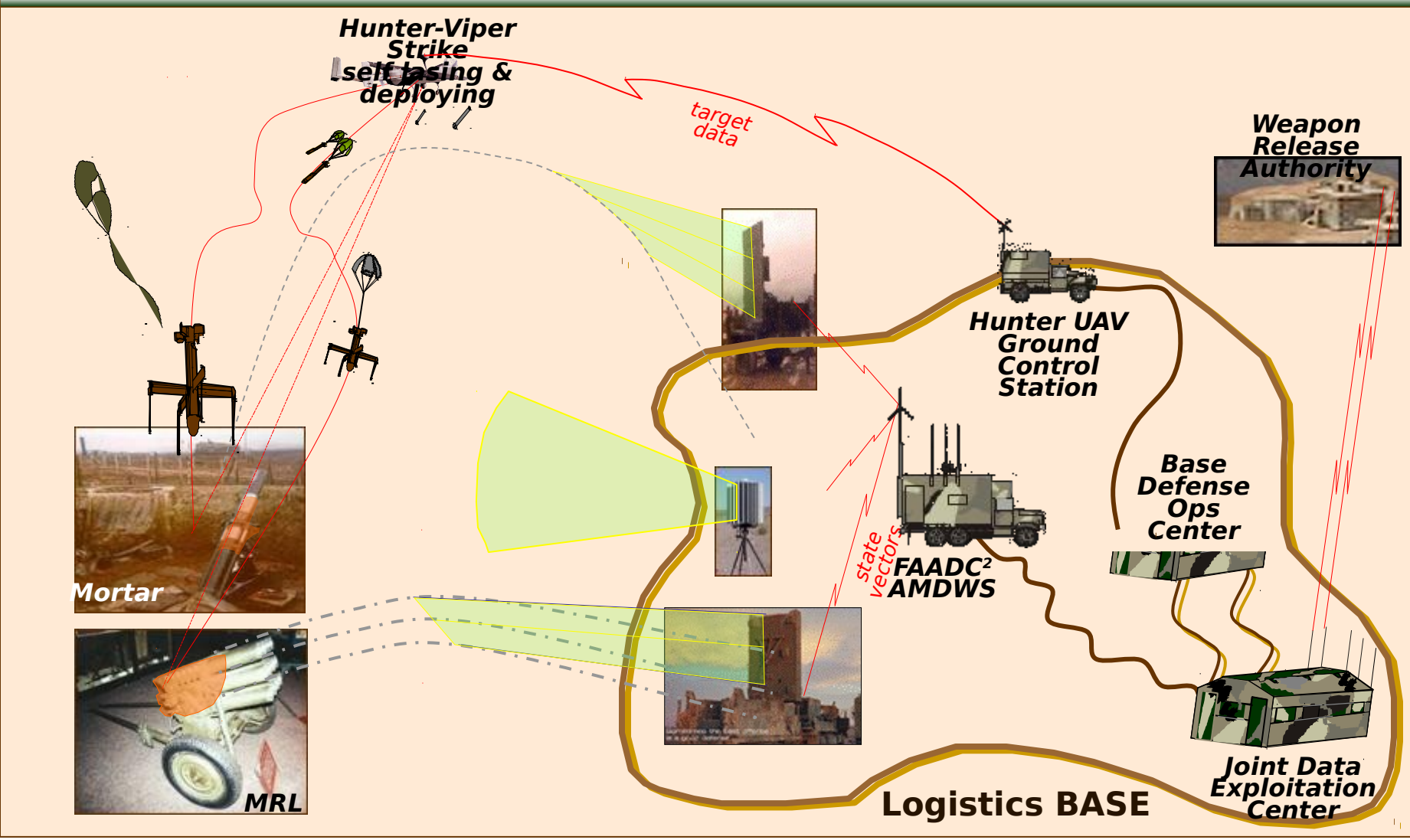
Current Capabilities

- ***Launch Altitudes** – 8 to 13k' and No Need to Maneuver*
- ***Low Circular Error of Probability** – Less than One Meter*
- ***Low Collateral Damage** – 16 Meters for Urban Targets*
- ***Top Down Blast Effect** – Limits Damage in Urban Canyons*
- ***Moving Targets** – Up to 40 kph with Some Target Maneuvering*
- ***Danger Close** – ATEC Approved at 50 Meters*
- ***Double the Payload** – Half the Weight of Hellfire*
- ***Multiple Laser Designations** – Air, Buddy, or Ground*
- ***Day or Night Capability** – All Laser Designators*
- ***Stand Off** – 1/2 to 1km Current ; 5km w/GPS*
- ***Current HE and Kinetic Warheads** plus Frag Sleeve Funded*
- ***Only Current Munition** for Class II & III Weaponized UAVS*

Current Missions

- ***"Golden Shots"***
  - Pinpoint a moving armored car in a motorcade
- ***Restricted (Minimal Collateral Damage) Urban Targets***
  - Reach down into cordoned urban canyons
  - Near vertical angle of attack projects warhead shrapnel into the target and ground minimizing collateral damage
- ***Convoy & TOC ISR & Security***
  - At 10k' AGL, UAVs relatively unseen, unheard, and undetectable
  - Allows observation of enemy preparations, IED placement, and ambush points
- ***Key Infrastructure ISR & Armed Response***
  - Refineries, pipelines, politically sensitive locations, etc.
- ***Monitor critical situations with timely response***
  - Undetected observation without ground troops in harm's way

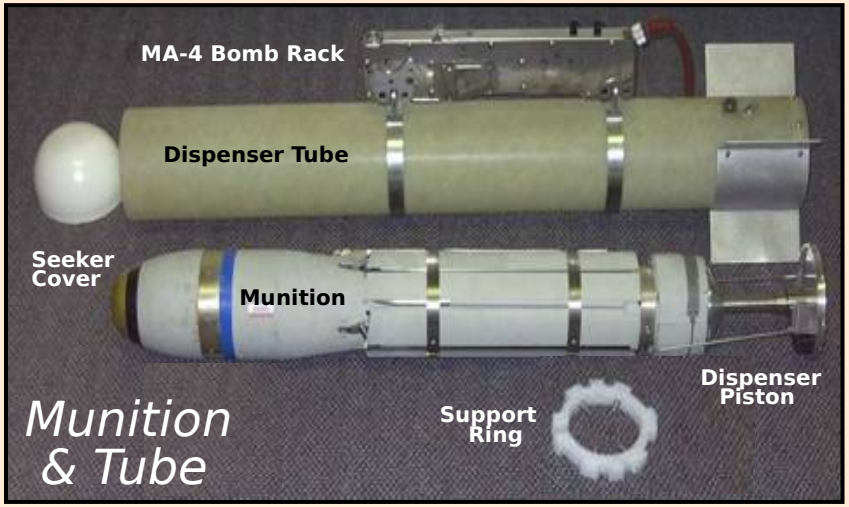
Viper Strike in the C-RAM Mission

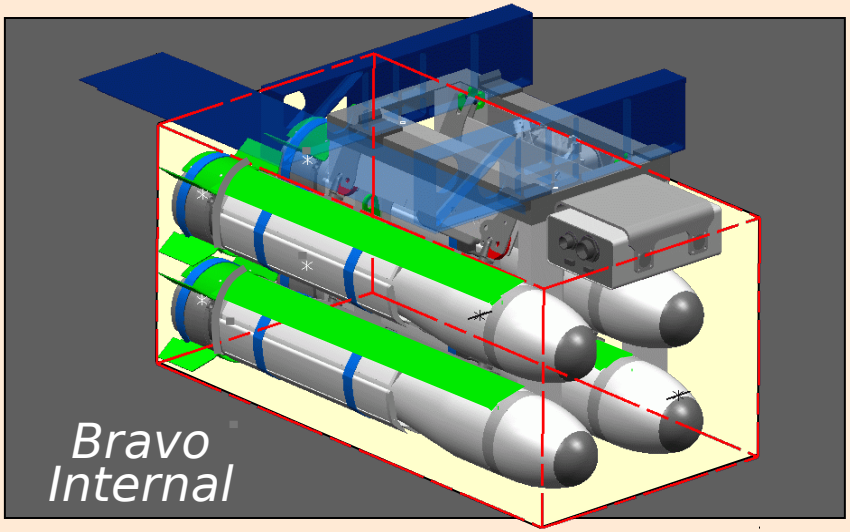


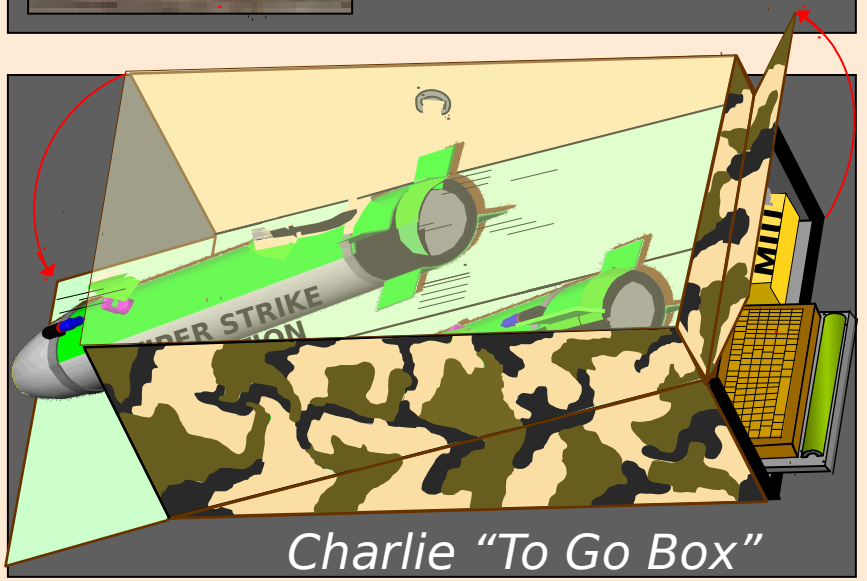
Viper Strike CRAM Demo

Various Carriers

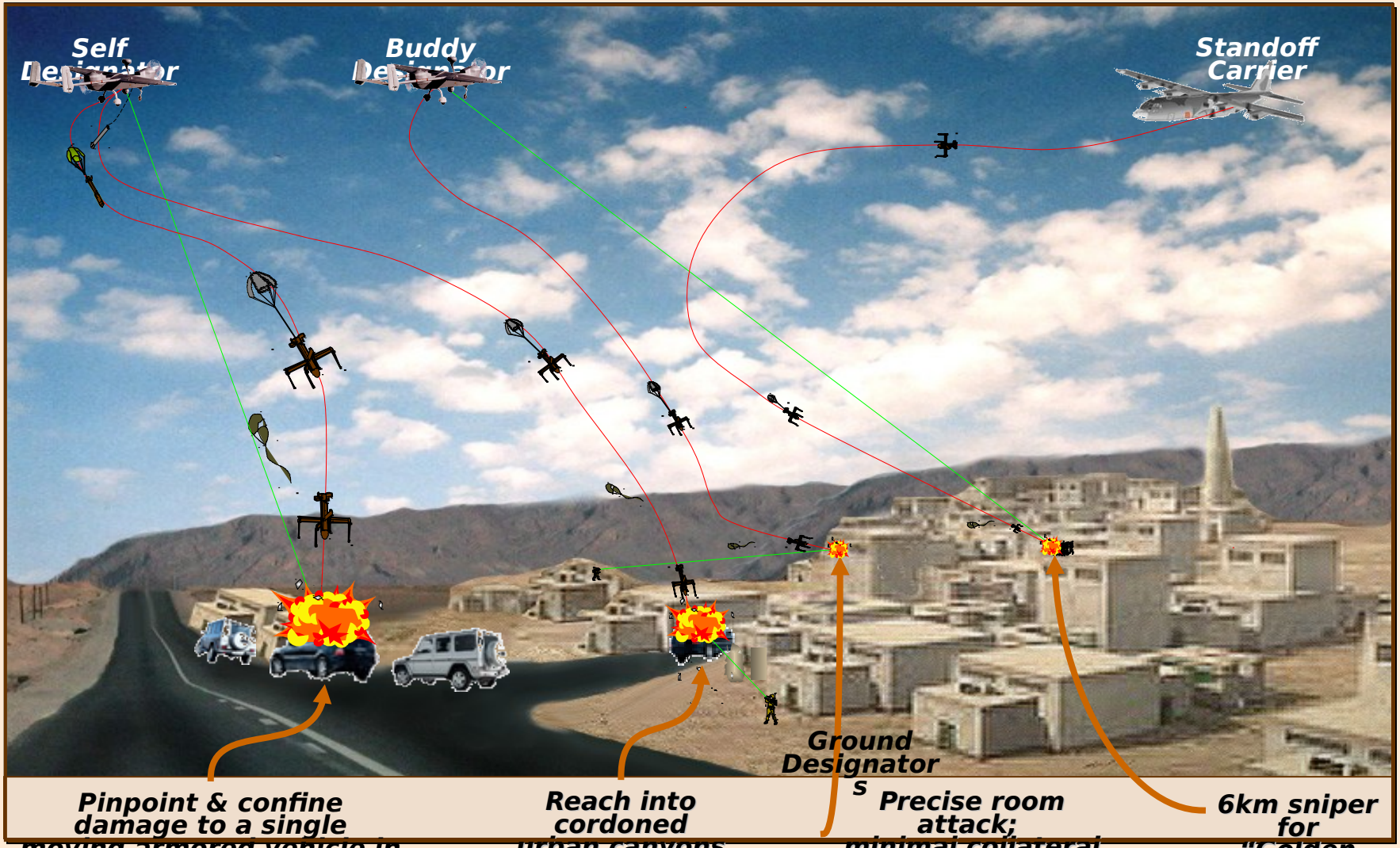
Various Packages







Future Capabilities


Self Designator
Buddy Designator
Standoff Carrier
Ground Designators
Pinpoint & confine damage to a single moving armored vehicle in motorcade
Reach into cordoned urban canyons
Precise room attack; minimal collateral damage
6km sniper for "Golden Shots"

Summary: Fielded & Certified!